



U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs  
Registration Division (7505P)  
Ariel Rios Building  
1200 Pennsylvania Ave., NW  
Washington, D.C. 20460

A Reg. Number:  279-3454	Date of Issuance:  NOV - 2 2012
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NOTICE OF PESTICIDE:

Registration  
 Reregistration  
(under FIFRA, as amended)

Term of Issuance:  
Unconditional

Name of Pesticide Product:  
F9007 35 WG Herbicide

Name and Address of Registrant (include ZIP Code):  
FMC Corporation  
Agricultural Products Group  
1735 Market Street  
Philadelphia, PA 19103

**Note:** Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

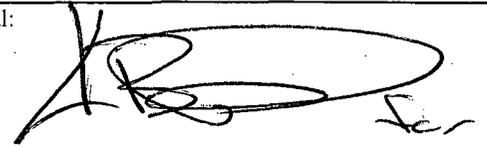
On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act. Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is unconditionally registered in accordance with FIFRA sec. 3(c)(5) provided the following items are addressed:

- 1) Submit and/or cite all data required for registration/reregistration review of your product when the Agency requires all registrants of similar products to submit data. If required, failure to submit acceptable data to fulfill these requirements may result in registration cancellation in accordance with FIFRA section 6(e).
- 2) Replace "EPA Reg. No 279-xxxxx" with "EPA Reg. No. 279-3454" and assure that the EPA Establishment Number and Net Contents are also on the label.
- 3) The term "Fallow" appearing at the top of page 1 as a product use site and throughout the label requires clarification. Change "Fallow" to "Fallow Land" on page 1 and throughout the label. For example, the term "Fallow" appearing on pages 14-17 must also be changed to "Fallow Land".
- 4) Per the Label Review Manual, the word "esta" must be replaced with "la" in statement under the WARNING/AVISO signal word on page 1 "Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)"
- 5) Per the Acute Toxicity Review, the statement under the Hazards to Domestic Animals section on page 3 must be revised to read "Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet."

SEE NEXT PAGE FOR ADDITIONAL COMMENTS

Signature of Approving Official:  
Kathryn V. Montague  
Product Manager 23  
Herbicide Branch  
Registration Division (7505P)



Date:  
NOV - 2 2012

6) The information in FIRST AID box text must appear in one location on page 1. It is not acceptable to present FIRST AID information on pages 1 and 3, and have the Table of Contents appear on page 2. Move the HOTLINE NUMBER and associated information appearing at the top of page 3 to page 1 to have the FIRST AID information appear in one location.

NOTE: Per the Acute Toxicity Review, the IF INHALED and IF SWALLOWED statements appearing in the FIRST AID box are not required for this product. This optional text may remain on the label as additional safety information for product users or it may be removed.

7) Per the Acute Toxicity Review, the statement under the Personal Protective Equipment (PPE) section on page 3 must include a reference to the type of gloves, and must include the following text:

Personal Protective Equipment (PPE)

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for Category A on an EPA Chemical Resistance Category Selection Chart.

Applicators and other handlers must wear: long-sleeved shirt and long pants, chemical-resistant gloves (such as Natural Rubber, Selection Category A), and shoes plus socks.

8) Per the Label Review Manual, the PPE laundering instructions on page 3 must be complete. Add the word "exist" for the statement to read "Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry."

9) For consistency, the first bullet in the User Safety Recommendations box on page 3 must be revised to read "Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet."

10) The header "PRECAUTIONS" appearing at the bottom of page 3 must be changed to read "RESTRICTIONS AND PRECAUTIONS". Additionally, you must add the restriction "Do not apply this product through any type of irrigation system" to this section.

11) Per the Label Review Manual, the early-entry Personal Protective Equipment requirement appearing in the Agricultural Use Requirements box on page 4 as "chemical-resistant gloves made of any waterproof material." must be changed to read "chemical-resistant gloves (such as Natural Rubber, Selection Category A)".

12) Per the Label Review Manual, the container handling instructions for nonrefillable containers greater than 5 gallons must include "Then offer for recycling if available, or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities." to appear as the last sentence in the paragraph.

13) The term "GENERAL INFORMATION" or "General Information" appears as a header on pages 7, 26, and 28, and is later referenced on pages 29 and 30. Throughout the label, replace "GENERAL INFORMATION" and "General Information" with "PRODUCT INFORMATION" or "Product Information".

14) In the PREHARVEST INTERVALS chart appearing on page 12, the header in the Grazing and Forage PHI column must specify that the 0-30 interval refers to the number of days. For clarity, the column header must be revised to include the word "Days".

15) For clarity, the header for the use rate chart at the top of page 12 must be changed to read "F9007 MAXIMUM USE RATE INFORMATION". An additional statement clearly indicating that the maximum use rates must not be exceeded must appear in or in close proximity to this chart. The statement "Restriction: Do not exceed the maximum use rates specified in this chart." or similar language is acceptable.

16) The Grazing section on page 18 that states "There are no grazing restrictions on this product." conflicts with grazing restrictions listed elsewhere on the label and must be removed.

17) Change the term "recommend 2,4-D rate" to "specified 2,4-D rate" on page 23 under "Timothy Precautions" for the bullet to read "tank mix F9007 with 2,4-D at the specified 2,4-D rate for Timothy Grass".

18) The header "PRECAUTIONS" appearing near the bottom of page 28 must be changed to read "RESTRICTIONS AND PRECAUTIONS".

19) NOTE: The proposed basic Confidential Statement of Formula (CSF) dated June 20, 2012 is acceptable.

20) NOTE: While no additional data is being requested at this time, marketing claims made on the pesticide label must be substantiated by data maintained in your files. If data supporting marketing claims made on the product label is not available then those claims must be removed.

21) NOTE: Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

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EPA Registration #: 279-3454  
Product Name: F9007 35 WG Herbicide  
Decision Number: 465940

22) Submit one (1) copy of the revised final printed label before the product is released for shipment.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records.

# F9007 35 WG Herbicide

For Selective Weed Control in Pastures, Grass (including native grasses, cultivated grasses, and energy grasses) Rangeland, Sod Farms, Fallow, Grain Sorghum, Wheat, Triticale, and Barley.

<b>EPA Reg. No. 279-xxxxx</b>	<b>EPA Est. XXX</b>
<b>Active Ingredients:</b>	<b>By Wt.</b>
Carfentrazone-ethyl*	20.0%
Metsulfuron-methyl*	15.0%
Other Ingredients:	65.0%
<b>Total:</b> .....	<b>100.0%</b>

\*F9007 Herbicide contains 0.35 pounds of active ingredient per one pound of product (0.2 lbs active of Carfentrazone-ethyl and 0.15 lbs active of Metsulfuron-methyl).

U.S. Patent No. XXXXXXXXXXXX

## KEEP OUT OF REACH OF CHILDREN CAUTION/AVISO

See other panels for additional precautionary information.

Si usted no entiende esta etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand this label, find someone to explain it to you in detail.)

FIRST AID (2)	
<b>IF ON SKIN OR CLOTHING</b>	<ul style="list-style-type: none"> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF IN EYES</b>	<ul style="list-style-type: none"> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF INHALED</b>	<ul style="list-style-type: none"> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>
<b>IF SWALLOWED</b>	<ul style="list-style-type: none"> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>

**ACCEPTED**  
with **COMMENTS**  
In EPA Letter Dated:  
NOV -2 2012  
Under the Federal Insecticide,  
Fungicide, and Rodenticide Act  
as amended, for the pesticide  
registered under EPA Reg. No.

279-3454

Net Contents:



FMC Corporation  
Agricultural Products Group  
1735 Market Street  
Philadelphia, PA 19103

F9007 35 WG 06-12-12



<b>HOTLINE NUMBER</b>
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-331-3148 for emergency medical treatment information.
<b>For Information Regarding the Use of this Product Call 1-800-321-1FMC (1362)</b>

### PRECAUTIONARY STATEMENTS (3)

#### Hazards to Humans and Domestic Animals (3.1)

##### CAUTION

Harmful if swallowed. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

#### Personal Protective Equipment (PPE) (4)

Applicators and other handlers must wear: long-sleeved shirt and long pants, chemical-resistant gloves, and shoes plus socks.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### User Safety Recommendations

Users should:

- Wash hands before eating, drinking, and chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling the product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

#### Environmental Hazards (5)

This pesticide is very toxic to algae and moderately toxic to marine/estuarine invertebrates. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to terrestrial and aquatic plants in neighboring areas. Do not contaminate water when disposing of equipment washwaters or rinsate.

Surface water advisory: F9007 HERBICIDE can contaminate surface water through spray drift. Under some conditions, F9007 HERBICIDE may also have a high potential for runoff into surface water (primarily via dissolution in runoff water), for several to many months post-application. These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas overlying extremely shallow groundwater, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas over-lying tile drainage systems that drain to surface waters.

#### PRECAUTIONS

- Injury to or loss of desirable trees or vegetation may result from failure to observe the following:
- Do not apply, drain, or flush equipment on or near desirable trees or other plants, or on areas where their roots may extend, or in location where the chemical may be washed or moved into contact with their roots.
- Do not apply to irrigated land where tailwater will be used to irrigate crops other than wheat, triticale, and barley.
- Do not apply to frozen ground as surface runoff may occur.
- Do not apply to snow-covered ground.

- Wheat, triticale, and barley varieties may differ in their response to various herbicides, FMC recommends that you first consult your state Experiment Station or University Extension Service for varietal sensitivity information of these crops to any herbicide. If no information is available, limit the initial use of **F9007** to a small area as a test plot for varietal interactions prior to use on large scale areas.
- Under certain conditions, such as heavy rainfall, prolonged cold weather, or wide fluctuations in day/night temperatures prior to or soon after **F9007** application, temporary discoloration and/or crop injury may occur.
- **F9007** should not be applied to wheat, triticale, and barley that are stressed by severe weather conditions, drought, low fertility, water-saturated soil, disease, or insect damage; as crop injury may result. Risk of injury is greatest when crop is in the 2 to 5-leaf stage. Severe winter stress, drought, disease or insect damage following application also may result in crop injury.
- The combined treatment effects of **F9007** post emergence preceded by preemergence wild oat herbicides may cause crop injury to spring wheat when crop stress (soil crusting, planting too deep, prolonged cold weather, or drought) causes poor seedling vigor.
- In the Pacific Northwest, avoid making applications during winter months when weather conditions are unpredictable and can be severe to prevent cold weather-related crop injury.
- Do not apply to triticale, wheat, or barley or pastures undersown with legumes, as injury to the legume forage species may result.
- To reduce the potential for movement of treated soil due to wind erosion, do not apply to powdery dry or light sandy soils until they have been stabilized by rainfall, trashy mulch, reduced tillage, or other cultural practices. Injury to immediately adjacent crops may occur when treated soil is blown onto land used to produce crops other than cereal grains or pasture/rangeland.
- For ground applications applied under dry, dusty field conditions, control of weeds in wheel track areas may be reduced. The addition of 2,4-D or MCPA should improve weed control under these conditions.

### **DIRECTIONS FOR USE (6)**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read all Directions for Use carefully before applying.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

**FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN POOR WEED CONTROL, CROP INJURY, OR ILLEGAL RESIDUES.**

#### **Agricultural Use Requirements (7)**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), notification to workers, and restricted-entry interval. The requirements in this box apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- coveralls over long-sleeved shirt and long pants.
- chemical-resistant gloves made of any waterproof material.
- shoes plus socks.

**Non-Agricultural Use Requirements (8)**

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Re-entry Statement: Do not allow people (other than applicator) or pets on treatment area during application. Do not enter treatment area until spray has dried.

**CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY (9)**

Notice: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded. The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions beyond the control of FMC or Seller. To the extent consistent with applicable law, all such risks shall be assumed by Buyer and User, and, to the extent consistent with applicable law, Buyer and User agree to hold FMC and Seller harmless for any claims relating to such factors. Seller warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the Directions for Use when used in accordance with the directions under normal conditions of use. **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, FMC MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE, NOR ANY OTHER EXPRESS OR IMPLIED WARRANTIES WITH RESPECT TO THE SELECTION, PURCHASE, OR USE OF THIS PRODUCT.**

Any warranties, express or implied, having been made are inapplicable if this product has been used contrary to label instructions, or under abnormal conditions, or under conditions not reasonably foreseeable to (or beyond the control of) seller or FMC, and, to the extent permitted by applicable law, buyer assumes the risk of any such use. To the extent consistent with applicable law, FMC or seller shall not be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF FMC AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF FMC OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

This Condition of Sale and Limitation of Warranty and Liability may not be amended by any oral or written agreement.

**STORAGE AND DISPOSAL (10)**

Do not contaminate water, food or feed by storage or disposal.

**Pesticide Storage**

Store product in original container only. Do not contaminate water, food, or feed by storage or disposal. Store in a cool dry place and avoid excess heat.

**In Case of Spill**

Avoid contact. Isolate areas and keep out animals and unprotected persons.

**To Confine Spills**

Dike surrounding area; sweep up spillage, Dispose of in accordance with information given under Pesticide Disposal. Wash spill area with water, absorb with sand, cat litter or commercial clay, sweep up and dispose of in an approved manner. Place damaged container in a large holding container. Identify contents per required hazardous waste labeling regulations.

## **Container Disposal (11)**

### **Pesticide Disposal**

Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative of the nearest EPA Regional Office for guidance.

**Metal or Plastic Containers** - Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: (For containers greater than 5 gallons) Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

(For containers 5 gallons or less) Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available, or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities. Do not cut or weld metal containers.

**Returnable/Refillable Containers** - Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents into application equipment or mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities.

## **RESISTANCE MANAGEMENT (12)**

### **Resistant Weeds (12.1)**

Some weeds are known to develop resistance to herbicides that have been used repeatedly. While the development of resistance is well understood, it is not easily predicted. Therefore herbicides should be used in conjunction with resistance management strategies in the area. Consult the local or State agricultural advisors for herbicide resistance strategies. If weed resistance should develop in the area, this product used alone may not continue to provide sufficient levels of weed control. If the reduced levels of control cannot be attributed to improper application timing, unfavorable weather conditions or abnormally high weed pressure, a resistant strain may have developed. To reduce the potential for weed resistance, use this product in a rotation program with other classes of chemistry and modes of action. Always apply this product at the recommended rates and in accordance with the use directions. For optimum performance, scout fields carefully and begin applications when weeds are small. If resistance is suspected, contact the local or State agricultural advisors.

### **Glyphosate Resistant Weeds (12.2)**

Some populations of weeds may be tolerant or resistant to glyphosate-based herbicides. Applying F9007 in a tank mixture with glyphosate for control of emerged resistant weeds larger than recommended in the weed control sections for each crop may result in unsatisfactory control.

## **INTEGRATED PEST MANAGEMENT (13)**

To better manage weed resistance when using F9007, use a combination of tillage plus tank-mix partners or sequential herbicide applications that have a different mode of action than F9007 to control escaped weeds. Do not let weed escapes go to seed.

Consult your agricultural dealer, consultant, applicator, and/or appropriate state agricultural extension service representative for specific alternative herbicide recommendations available in your area. It is prudent to keep F9007 records of pesticides applied to individual fields to help obtain information on the spread and dispersal of resistant biotypes.

## GENERAL INFORMATION (14)

F9007 HERBICIDE is for post emergent weed control in wheat, triticale, barley, grain sorghum, grasses, sod farms, pasture, rangeland, and for fallow ground weed management. F9007 is formulated as a 35 WDG (Water Dispersible Granule) containing 0.35 lbs of active ingredient per pound of product. Consult local University, Extension, or Department of Agriculture specialists before use to insure F9007 is registered for use in your state. F9007 is not registered for use in Alamosa, Conejos, Costilla, Rio Grande, and Saquache counties of Colorado.

Post emergent weed control with F9007 HERBICIDE is improved when adequate soil moisture is present at application. Maximum foliar uptake and weed control effects are seen when no rainfall or irrigation occurs within 24 hours after application. If rainfall or irrigation of at least 0.5 inches does not occur within 7 days after application, irrigation of at least 0.5 inches is recommended.

Weed control is optimized when the product is applied to actively growing weeds up to 4 inches in height. F9007 is a contact herbicide. Within a few hours following application, the foliage of susceptible weeds show signs of desiccation, and in subsequent days or weeks further necrosis, chlorosis, and death of the weed meristem occurs.

Extremes in environmental conditions such as temperature, moisture, soil conditions, and cultural practices may affect the activity of F9007. Under warm moist conditions, herbicide symptoms may be accelerated. Under very dry conditions, the expression of herbicide symptoms may be delayed or reduced; as weeds hardened off by drought are less susceptible to absorption and translocation of F9007.

F9007 is rapidly absorbed through the foliage of plants. To avoid significant crop response, applications should not be made within 6 to 8 hours of either rain, snow, or irrigation, or when heavy dew is present on the crop. Certain spray tank additives, cultural practices, soil conditions, or environmental conditions such as extremes in temperature or moisture may enhance the potential of herbicidal symptoms on the crop.

When applying F9007 alone for post emergent weed control, apply before the weeds have reached the maximum height listed in the appropriate weed control table(s) for the crop. Application after weeds have reached the listed maximum height for control could result in commercially unacceptable weed control. For control of weeds by post applications larger than listed in the weed control table, and for wider spectrum, apply in tank-mixture with herbicide(s) that are labeled for control of targeted weeds. Uniform spray coverage is necessary for optimum performance.

F9007 can be mixed with water, liquid fertilizer or mixtures of water and liquid fertilizer and adjuvants and applied to labeled crops for selective post emergence control of broadleaf weeds.

### Product Measurement

F9007 may be measured using the F9007 volumetric measuring cup. The degree of accuracy of this cup is subject to variability in precise measurement of the product. For more precise measurements, use scales calibrated in ounces.

### Adjuvant Use Requirements

Applications of F9007 must include either a nonionic surfactant or a crop oil concentrate except when specified in the crop section of the label. In addition, an ammonium nitrogen fertilizer may be used. If another herbicide is tank mixed with F9007, select adjuvants recommended for use with both products.

### Nonionic Surfactants (NIS)

- Apply 0.06 to 0.50% v/v (1/2 to 4 pts. per 100 gallons of spray solution) – see Tank Mixtures section for additional information.
- Surfactant products must contain at least 60% nonionic surfactant with a hydrophilic/lipophilic balance (HLB) greater than 12.

**Exceptions:** On all spring wheat and spring or winter barely use 1/2 to 1qt. per 100 gallons.

### Petroleum Crop Oil Concentrate (COC) or Modified Seed Oil (MSO)

- Apply at 1% v/v (1 gallon per 100 gallons spray solution) or 2% under arid conditions. • Oil adjuvants must contain at least 80% high quality, petroleum (mineral) or modified vegetable seed oil with at least 15% surfactant emulsifiers.

**Ammonium Nitrogen Fertilizer**

• Use 2 qts./acre of a high-quality urea ammonium nitrate (UAN), such as 28%N or 32%N, or 2 lbs./acre of spray grade ammonium sulfate (AMS). Use 4 qts./acre UAN or 4 lbs./acre AMS under arid conditions. If using nitrogen fertilizer in the spray solution, the addition of surfactant is necessary. Add surfactant at 1/2 pt. – 1 qt. per 100 gal. of spray solution (0.06 – 0.25% v/v) based on local guidance.

• Do not use liquid nitrogen fertilizer as the total carrier solution.

**Special Adjuvant Types**

• Combination adjuvant products may be used at doses that provide the required amount of NIS, COC, MSO and/or ammonium nitrogen fertilizer. Consult product literature for use rates and restrictions.

• In addition to the adjuvants specified above, other adjuvant types may be used if they provide the same functionality. Antifoaming agents may be used if needed.

**Tank Mixtures**

F9007 may be tank-mixed with other herbicides to control weeds not listed on this label. Read and follow all manufacturers' label directions for the companion herbicide. Follow the most restrictive use directions of the products used in the mixture. Tank mixtures of F9007 with EC formulations of other crop protection products, crop oil concentrates, methylated seed oils, silicone based adjuvants, 28% nitrogen or ammonium sulfate may increase crop response.

**On-Farm Testing**

Not all varieties or cultivars of labeled crops have been fully evaluated under all environmental and soil conditions. For additional and specific information, consult University or local Extension specialists. It may also be beneficial to conduct small on-farm trials under actual conditions with specific varieties or cultivars before treating large acreage.

**Methods of Application**

F9007 is a versatile herbicide utilizing several different application methods to achieve the desired results. If F9007 is being applied in standing crop situations, application methods and adjustments must be precise to prevent unfavorable crop response on the desirable green stem tissue, foliage, blooms or fruit.

**Spray volumes**

**Ground applications** should be made in a minimum of 10 gallons of finished spray per acre to insure good target coverage. Spray tips must be positioned no less than 18 inches above the crop and operated in such manner as to avoid overlaps, concentration into crop whorls, and slower than calibrated ground speeds.

**Aerial applications** are allowed in some situations. Aerial treatments should be made with a minimum of 2 gallons of total spray per acre with a minimum VMD of 450 microns.

**Post directed** applications may be utilized when labeled crops have reached minimum growth stages where sprays may be directed to the target weeds, but is not deposited on the green stem, foliage, blooms or fruit of the crop.

**Hooded Sprayer** applications are allowed on labeled crops. To apply **F9007** using a hooded sprayer, refer to the Hooded Sprayer Section (25) for specific adjustment and operation instructions. For additional information, refer to the individual crop sections of this label.

**Shielded Sprayer** applications may be utilized in some situations. Sprayers should be designed and operated so that the shield between the spray pattern and the crop will prevent the deposition of spray to green stem plant tissue, foliage, blooms or fruit of the crop.

**Mixing and Loading Requirements**

Fill the spray tank 3/4 full with clean water. Make sure the agitation system is operating while adding products. Complete filling the spray tank to the desired level. The spray tank agitation

should be sufficient to ensure uniform spray mixture during application and must continue until the spray tank has been emptied. When tankmixing with other products, F9007 should be mixed first in the spray tank. After the F9007 is thoroughly mixed, add the other products as specified on their label. Ensure the compatibility of other products with F9007 before mixing them together in the spray tank.

If the spray solution has to set overnight, maintain continuous agitation until all the spray solution has been used.

Use 50-mesh screens or larger.

Do not use with tank additives that alter the pH of the spray solution below pH 5 or above pH 8. Buffer spray solution to alter the pH range as appropriate.

### **Spray Equipment Clean-Out (14.1)**

Many new pesticides are very active at low rates, especially to sensitive crops. Residues left in mixing equipment, spray tanks, hoses, spray booms and nozzles can cause crop effects if they are not properly cleaned. As soon as possible after spraying F9007 and before using the sprayer equipment for any other applications, the sprayer equipment must be thoroughly cleaned using the following procedure. In addition, users must take appropriate steps to ensure proper equipment clean-out for any other products mixed with F9007 as required on the other product labels. More complete cleaning can be achieved if the spray system is cleaned immediately following the application.

1. Drain sprayer tank, hoses, spray boom and spray nozzles. Use a high-pressure detergent wash to remove physical sediment and residues from the inside of the sprayer tank and thoroughly rinse. Then, thoroughly flush sprayer hoses, spray boom and spray nozzles with a clean water rinse. Remove and clean spray tips and all filters and screens (tank, spray hose and spray tips) separately in the ammonia solution of Step 2.
2. Next, prepare a sprayer cleaning solution by adding three gallons of ammonia (containing at least 3% active) per 100 gallons of clean water. Prepare sufficient cleaning solution to allow the operation of the spray system for a minimum of 15 minutes to thoroughly flush hoses, spray boom and spray nozzles.
3. Convenient and thorough cleaning of the sprayer can be achieved if the ammonia solution or fresh water is left in the spray tank, hoses, spray booms and spray nozzles overnight or during storage.
4. Before using the sprayer, completely drain the sprayer system. Rinse the tank with clean water and flush through the hoses, spray boom, and spray nozzles with clean water. Remove and clean spray tips and all filters and screens (tank, spray hose and spray tip) separately in an ammonia solution.
5. Properly dispose of all cleaning solution and rinsate in accordance with Federal, State, and local regulations and guidelines.

Do not apply sprayer cleaning solutions or rinsate to sensitive crops.

Do not store the sprayer overnight or for any extended period of time with F9007 spray solution remaining in the tank, spray lines, spray boom plumbing, spray nozzles or strainers.

If the sprayer has been stored or idle, purge the spray boom and nozzles with clean water before beginning any application.

Should small quantities of F9007 remain in inadequately cleaned mixing, loading and/or spray equipment, they may be released during subsequent applications potentially causing effects to certain crops and other vegetation. FMC accepts no liability for any effects due to inadequately cleaned equipment.

## APPLICATION INFORMATION (15)

### Ground Application

Use ground sprayers designed, calibrated and operated to deliver uniform spray droplets to the targeted plant or plant parts. Adjust sprayer nozzles to achieve uniform plant coverage. Overlaps and slower ground speeds (caused by continuing to spray while starting, stopping or turning) may result in higher application rates and possible crop response.

### Spray Buffer for Ground Application

Spray buffer zones for ground applications, listed in chart below, are required where local indigenous endangered plant species are found.

<b>Buffers to Indigenous Endangered Plant Species</b>		
<b>F9007 USE RATE (lbs. ai per acre)</b>	<b>Low Spray Boom Buffer (ft.)</b>	<b>High Spray Boom Buffer (ft.)</b>
0.0438	20	33
0.0547	26	46

### Conventional Boom and Nozzle Sprayers

Use a boom and nozzle sprayer equipped with the appropriate nozzles, spray tips and screens and adjusted to provide optimum spray distribution and coverage at the appropriate operating pressures. Use nozzles that produce minimal amounts of fine spray droplets. Do not exceed 30 psi spray pressure unless otherwise required by the manufacturer of drift reducing nozzles. Apply a minimum of 10 gallons of finished spray per acre. Use higher spray volumes when there is a dense weed population or crop canopy. Adjust sprayers to position spray tips no lower than 18 inches above the crop. Operate the sprayer to avoid the application of high herbicide rates directly over the rows and/or into the whorl of treated crop plants.

### Directed Sprayers

For directed sprayers apply F9007 with drop nozzles or other spray equipment capable of directing the spray to the target weeds and away from sensitive plant parts. Apply F9007 up to the maximum rate for the target crop for the control of larger weed sizes or weeds not controlled with lower use rates. Use appropriate rates of adjuvants such as nonionic surfactants, crop oil concentrates or methylated seed oils.

### Hooded Sprayers

To apply F9007 using a hooded sprayer, refer to the Hooded Sprayer Section (25) for specific adjustment and operation instructions. For additional information, refer to the individual crop sections of this label.

## AERIAL APPLICATION

Use nozzle types and arrangements that will provide optimum coverage while producing a minimal amount of fine droplets. Apply at a minimum of 2 gallons of finished spray per acre. Higher aerial spray volumes are required for harvest aid and defoliation treatments. Higher spray volumes are required when there is a dense weed population or crop canopy.

### SPRAY DRIFT MANAGEMENT (15.1)

#### AVOIDING SPRAY DRIFT AT THE APPLICATION

#### SITE IS THE RESPONSIBILITY OF THE APPLICATOR AND THE GROWER.

The interaction of many equipment and weather related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

The following drift management requirements must be followed to avoid off-target movement from applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications of dry materials.

Where states have more stringent regulations, they must be observed.

## INFORMATION ON DROPLET SIZE

The most effective way to reduce drift potential is to apply large droplets. The optimum drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift when applications are made improperly, or under unfavorable environmental conditions (See Wind, Temperature and Humidity, and Temperature Inversions).

### Controlling Spray Droplet Size

**VMD** – VMD is the expression of the droplet size of the spray cloud. The VMD value means that 50% of the droplets are larger than the expressed value and 50% of the droplets are smaller than the expressed value. Optimum F9007 spray clouds should be 450 microns with fewer than 10% of the droplets being 200 microns or less.

**Volume** - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows usually produce larger droplets.

**Pressure** - Do not use pressures greater than that specified by the nozzle manufacturer. For many nozzle types, lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.

**Number of Nozzles** - Use the minimum number of nozzles that provide uniform coverage.

**Nozzle Orientation** – For aerial application, orient nozzles so that the spray is released parallel to the airstream. A parallel orientation results in larger droplets than other orientations and reduces air turbulence and the production of small droplets. Significant deflection from horizontal will reduce droplet size and increase drift potential.

**Nozzle Type** - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low drift nozzles. For aerial applications, solid stream nozzles oriented straight back produce the largest droplets and potentially the least drift.

**Boom Length** - For some aerial use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.

**Application Height** – Making applications at the lowest height that is safe reduces exposure of spray droplets to evaporation and wind movement. Aerial applications should not be made at a height greater than 10 feet above the top of the target plants unless a greater height is required for aircraft safety.

**Swath Adjustment** - Swath adjustment distance must increase, with increasing drift potential (higher wind, smaller drops, etc.).

**Wind** - Drift potential is lowest between winds speeds of 3 to 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given wind speed. Applications shall be avoided below 3 mph due to variable wind direction and high inversion potential. Do not apply F9007 when sustained wind speed exceeds 15 mph. NOTE: Local terrain can influence wind patterns. Every applicator shall be familiar with local wind patterns and how they affect spray drift.

**Temperature and Humidity** - When making applications in low relative humidity set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

**Temperature Inversions** – Do not apply F9007 during a temperature inversion because the drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the following morning. Their presence can be indicated by ground fog. However, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

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**Sensitive Areas** – F9007 shall only be applied when the wind is blowing away from adjacent sensitive areas (e.g. residential areas, bodies of water, known habitats for threatened or endangered species and non-target crops).

**F9007 USE INFORMATION (16)**

Refer to the crop section of this label for specific product use directions.

<b>Maximum Allowable F9007 Use Per Acre Per Season for crops or crop grouping (17)</b>		
<b>Total Allowed F9007 Use Per Season *</b>		
<b>Crop/Crop Group/Crop Subgroup</b>	<b>F9007 (oz./acre) Per Season</b>	<b>Maximum Rate (lb ai/acre) Per Season</b>
Fallow	0.4	0.0088
Grass, Pasture, Rangeland (Group 17)	1.5	0.0328
Barley, Wheat, Triticale	0.4	0.0088
Grain Sorghum	0.2	0.0044
*The total allowable usage includes all applications made to the field per calendar year. This includes fallow treatments and all in-season treatments, including harvest aid.		

**PREHARVEST INTERVALS (18)**

Refer to the crop section of this label for specific product use directions.

<b>Crop/Crop Group/Crop Subgroup</b>	<b>PHI (Days Before Harvest)</b>	<b>Grazing and Forage PHI</b>	<b>Application Window</b>
Grass, Pasture, Rangeland (Group 17)	0	0	0
Dryland Barley, Spring Wheat, Triticale	10	7	Two leaf to Jointing
Durum Wheat and Wampum Spring Wheat, Irrigated Barley and Wheat,	10	7	Tillering to Jointing
Dryland Winter Wheat	10	7	Two leaf to Boot
Irrigated Winter Wheat	10	7	Tillering to Boot
Barley, Wheat, Triticale (Harvest Aid)	10	7	Hard Dough to Harvest
Grain Sorghum	3	30	Four to Fifteen inches in height

## ROTATION INTERVALS (19)

### ROTATIONAL INTERVALS FOR CEREALS

#### ALL GEOGRAPHIES

Following Use of F9007 at 0.4 oz per Acre

Crop	Minimum Cumulative Precipitation (inches)	Soil pH	Minimum Rotation Interval
Winter and spring wheat	No restrictions	7.9 or lower	1
Durum wheat, barley, spring/winter oat	No restrictions	7.9 or lower	10

### ROTATION INTERVALS FOR CROPS IN NON-IRRIGATED LAND Following Use of F9007 at 0.4 oz per Acre on Wheat, Triticale, Barley, Fallow or Pasture

State	Location		Soil pH	Minimum Cumulative Precipitation (inches)	Minimum Rotation Interval (months)
	County or Area	Crop			
Colorado	Statewide	Grain sorghum, Proso millet	7.9 or lower	No restrictions	10
		Flax, Safflower, Sunflower	7.9 or lower	No restrictions	22
		Field corn	7.9 or lower	15	12
		IR Corn	7.9 or lower	No restrictions	4
		STS Soybeans	7.9 or lower	No restrictions	4
Idaho	Southern Idaho	Flax, Safflower, Sunflower	7.9 or lower	No restrictions	22
	Statewide	Peas	6.8 or lower	18	10
		Lentils	6.9 to 7.9	18	15
		Canola	6.9 to 7.9	18	34
		Canola	6.9 to 7.9	18	22
		Condiment mustard	7.3 or lower	10	10
		Condiment mustard	7.4 or higher	28	34
		Chickpeas	7.3 or lower	10	10
		Chickpeas	7.4 or higher	28	34
Kansas	Statewide	Grain sorghum, Proso millet	7.9 or lower	No restrictions	10
		Flax, Safflower, Sunflower	7.9 or lower	No restrictions	22
	Central and Western Kansas (West of the Flint Hills)	Field corn	7.9 or lower	15	12
		IR Corn	7.9 or lower	15	4
	Western Kansas W. of Hwy. 183	Soybeans	7.5 or lower	22	22
		Soybeans	7.6 to 7.9	33	34
	Central Kansas; Generally E. of Hwy. 183 and W. of the Flint Hills	STS Soybeans	7.9 or lower	15	12
Montana	Statewide	Grain sorghum, Proso millet, Field corn	7.9 or lower	22	22
		Alfalfa (hay only)	7.6 to 7.9	No restrictions	22
		Alfalfa (hay only)	7.5 or lower	No restrictions	34
		Flax, Safflower, Sunflower	7.9 or lower	No restrictions	22

**ROTATION INTERVALS FOR CROPS IN NON-IRRIGATED LAND (continued)**  
**Following Use of F9007 at 0.4 oz per Acre on Wheat, Triticale, Barley, Fallow or Pasture**

State	Location		Soil pH	Minimum Cumulative Precipitation (inches)	Minimum Rotation Interval (months)
	County or Area	Crop			
Nebraska	Statewide	Grain sorghum, Proso millet	7.9 or lower	No restrictions	10
		Flax, Safflower, Sunflower	7.9 or lower	No restrictions	22
		IR Corn STS Soybeans	7.9 or lower	No restrictions	4
	Generally W. of Hwy. 77 and E. of the Panhandle	Field corn	7.9 or lower	15	12
		Soybeans	7.5 or lower 7.6 to 7.9	22 33	22 34
New Mexico	Statewide	Grain sorghum, Proso millet	7.9 or lower	No restrictions	10
		Flax, Safflower, Sunflower	7.9 or lower	No restrictions	22
	Eastern New Mexico	Cotton (dryland only)	7.9 or lower	30	22
North Dakota	W. of Hwy. 1	Grain sorghum, Proso millet, Field corn, Dry beans, Flax, Safflower, Sunflower	7.9 or lower	22	22
	E. of Hwy. 1	Grain sorghum, Proso millet, Field corn, Dry beans, Flax, Safflower, Sunflower	7.9 or lower	34	34
Oklahoma	Statewide	Grain sorghum, Proso millet	7.9 or lower	No restrictions	10
		Flax, Safflower, Sunflower	7.9 or lower	No restrictions	22
		Field corn	7.9 or lower	15	12
		IR Corn STS Soybean	7.9 or lower	No restrictions	4
	Panhandle	Cotton (dryland only)	7.9 or lower	30	22
	E. of the Panhandle	Cotton (dryland only)	7.9 or lower	25	14
Oregon	Statewide	Peas Lentils	6.8 or lower	18	10
		Canola	6.9 to 7.9	18	15
		Peas	6.9 to 7.9	18	34
		Lentils	6.9 to 7.9	18	34
		Canola	6.9 to 7.9	18	22
		Condiment mustard	7.3 or lower	10	10
		Condiment mustard	7.4 or higher	28	34
		Chickpeas	7.3 or lower	10	10
Chickpeas	7.4 or higher	28	34		

**ROTATION INTERVALS FOR CROPS IN NON-IRRIGATED LAND (continued)**  
**Following Use of F9007 at 0.4 oz per Acre on Wheat, Triticale, Barley, Fallow or Pasture**

State	Location		Soil pH	Minimum Cumulative Precipitation (inches)	Minimum Rotation Interval (months)
	County or Area	Crop			
South Dakota	Statewide	Flax, Safflower, Soybean, Sunflower	7.9 or lower	No restrictions	22
	S. of Hwy. 212 & E. of the Missouri River, & S. of Hwy. 34 W. of the Missouri River	Grain sorghum, Proso millet	7.9 or lower	13	12
	Generally E. of Missouri River & S. of Hwy. 14, & W. of Missouri River	Field corn	7.9 or lower	15	12
Texas	Statewide	Grain sorghum, Proso millet	7.9 or lower	No restrictions	10
		Flax, Safflower, Soybean, Sunflower	7.9 or lower	No restrictions	22
	Panhandle	Field corn	7.9 or lower	15	12
		Cotton (dryland only)	7.9 or lower	30	22
	N. of Central Texas*	Field corn	7.9 or lower	15	12
Cotton (dryland only)	7.9 or lower	25	14		
Washington	Statewide	Peas, Lentils, Canola	6.8 or lower	18	10
		Peas	6.9 to 7.9	18	15
		Lentils	6.9 to 7.9	18	34
		Canola	6.9 to 7.9	18	22
		Condiment mustard	7.3 or lower	10	10
		Condiment mustard	7.4 or higher	28	34
		Chickpeas	7.3 or lower	10	10
Chickpeas	7.4 or higher	28	34		
Utah	Statewide	Flax, Safflower, Sunflower	7.9 or lower	No restrictions	22
Wyoming	Statewide	Flax, Safflower, Sunflower	7.9 or lower	No restrictions	22
	Southern Wyoming	Grain sorghum, Proso millet	7.9 or lower	No restrictions	10
	Southern Wyoming (Goshen, Laramie, and Platte counties only)	Field corn	7.9 or lower	15	12
	Northern Wyoming	Grain sorghum, Proso millet, Field corn	7.9 or lower	22	22

\* The counties of N. Central Texas are: Archer, Baylor, Bell, Bosque, Bowie, Callahan, Camp, Cass, Clay, Collin, Cooke, Coryell, Dallas, Delta, Denton, Eastland, Ellis, Falls, Fannin, Foard, Franklin, Grayson, Hardeman, Haskell, Hill, Hood, Hopkins, Hunt, Jack, Johnson, Kaufman, Knox, Lamar, Limestone, McLennan, Milam, Montague, Morris, Navarro, Palo Pinto, Parker, Rains, Red River, Robertson, Rockwall, Shackelford, Somervell, Stephens, Tarrant, Throckmorton, Titus, Upshur, Van Zandt, Wilbarger, Wichita, Williamson, Wise, Wood, Young.

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**ROTATION INTERVALS IN PASTURE OR RANGELAND FOR OVERSEEDING AND RENOVATION**

Location	Crop	Maximum F9007 Rate on Pasture (oz)	Minimum Rotation Interval (months)
AL, AR, FL, GA, KY, LA, MS, NC, OK, SC, TN, TX, VA, WV	Alfalfa, red clover, white clover, sweet clover, bermudagrass, bluegrass, orchardgrass, bromegrass, ryegrass, fescue, timothy	0.4 to 1.20	4
	Wheat (except durum)	0.4 to 1.20	1
	Durum, barley, oat	0.4 to 1.20	10
ALL AREAS NOT INCLUDED ABOVE*	Red clover, white clover, and sweet clover	0.4 to 0.75	12
	Bermudagrass, bluegrass, orchardgrass, bromegrass, ryegrass, timothy	0.4 to 0.75	6
	Fescue	0.4 to 0.75	18
	Wheat (except durum) 1/10	0.4 to 0.75	1
	Durum, barley, oat	0.4 to 0.75	10

**For rotation intervals not covered above:**

The minimum rotation interval is 34 months with a least 28" of cumulative precipitation during the period:

- to any major field crop or pasture crop not listed (See the Rotation Intervals table)
- if the use rate applied is not specified in the table

To rotate to a major field crop at an interval shorter than specified, a field bioassay must be successfully completed on that crop. A field bioassay must be successfully completed before rotation to any minor crops (as determined by the USDA criteria). See section on Field Bioassay for further information.

# RECROPPING INTERVALS FOR GRASSES ON CONSERVATION RESERVE PROGRAM (CRP) After Spraying F9007 and Before Spraying Crops Other Than Wheat, Barley, Triticale, and Fallow.

Whenever **F9007** has previously been used in wheat, barley, triticale or fallow, the following grasses may be planted after the intervals specified in the tables below. The planting of grass and legume mixtures is not recommended as injury to legumes may occur.

- ❖ Bentgrasses
- ❖ Blue grama
- ❖ Bluestems – Big, Little, Plains, Sand, WW Spar
- ❖ Buffalograss
- ❖ Galleta
- ❖ Green needlegrass
- ❖ Green sprangletop
- ❖ Indian ricegrass
- ❖ Lovegrasses – Sand, Weeping
- ❖ Orchardgrass (excluding Piaute)
- ❖ Prairie sandreed
- ❖ Sand dropseed
- ❖ Sheep fescue
- ❖ Sideoats grama
- ❖ Switchgrass
- ❖ Wild-ryegrasses – Beardless, Russian
- ❖ Wheatgrasses – Crested, Intermediate, Pubescent, Slender, Streamback, Tall, Thickspike, Western

## F9007 ROTATIONAL INTERVALS for MN, MT, ND, SD, and Northern WY:

Soil pH	Use Rate (ounces/acre)	Minimum Interval for Planting Grasses
7.9 or lower	0.4	2 months (all grasses)

## F9007 ROTATIONAL INTERVAL for AR, CO, ID, KS, LA, NE, NM, OK, OR, TX, UT, WA, Southern WY:

Soil pH	Use Rate (ounces/acre)	Minimum Interval for Planting Grasses
7.5 or lower	0.4	4 months (all grasses)
7.6 to 7.9	0.4	4 months (Wheatgrasses only)

Before using **F9007**, carefully consider your crop rotation plans and options. For rotational flexibility, do not treat all of your wheat, barley, fallow, pasture, or rangeland acres at the same time.

### Minimum Rotational Intervals<sup>□</sup>

Minimum rotational intervals are determined by the rate of breakdown of **F9007** applied. **F9007** breakdown in the soil is affected by soil pH, presence of soil microorganisms, soil temperature, and soil moisture.

Low soil pH, high soil temperature, and high soil moisture increase **F9007** breakdown in soil, while high soil pH, low soil temperature, and low soil moisture will slow **F9007** breakdown.

Of these 3 factors, only soil pH remains relatively constant. Soil temperature, and to a greater extent, soil moisture, can vary significantly from year to year and from area to area. For this reason, soil temperatures and soil moisture should be monitored regularly when considering crop rotations.

<sup>□</sup>The minimum rotation interval represents the period of time from the last application to the anticipated date of the next planting.

**Soil pH Limitations**

F9007 should not be used on soils having a pH above 7.9, as extended soil residual activity could extend crop rotation intervals beyond normal. Under certain conditions, F9007 could remain in the soil for 34 months or more, injuring wheat and barley. In addition, other crops planted in high-pH soils can be extremely sensitive to low concentrations of F9007.

**Checking Soil pH**

Before using F9007, determine the soil pH of the areas of intended use. To obtain a representative pH value for the test area, take several 0" to 4" samples from different areas of the field and analyze them separately. Consult local University Extension Service publications for additional information on soil sampling procedures.

**BIOASSAY**

A field bioassay must be completed before rotating to any crop not listed (See the Rotation Intervals tables), or if the soil pH is not in the specified range, or if the use rate applied is not specified in the table, or if the minimum cumulative precipitation has not occurred since application.

**Field Bioassay**

To conduct a field bioassay, grow test strips of the crop or crops you plan to grow the following year in fields previously treated with this product. Crop response to the bioassay will indicate if it is safe to rotate to the crop(s) grown in the test strips.

**GRAZING**

There are no grazing restrictions on this product.

**IMPORTANT PRECAUTIONS**

Treated vegetation may be cut for forage or hay. Coveralls, shoes plus socks, and chemical resistant gloves made of waterproof material must be worn if cutting within 12 hours of treatment.

**WEEDS CONTROLLED (20)**

**Wheat, Barley, Triticale, Grain Sorghum, Grasses, Sod, Pasture, Rangeland, and Fallow**

Unless otherwise directed, treat when weeds are less than 4" tall or 4" across and are actively growing. Effectiveness may be reduced if rainfall occurs within 4 hours after application.

**NOTE: Thorough spray coverage of all weed species listed below is very important.**

**F9007 at 0.4 oz. per acre – Weeds Controlled**

- Blue/purple mustard\*
- Bur buttercup (testiculate)
- Coast fiddleneck (tarweed)
- Common chickweed
- Common purslane
- Conical catchfly
- Cowcockle
- False chamomile
- Field pennycress (fanweed)
- Filaree
- Flixweed\*
- Groundsel (common)
- Henbit
- Kochia\*
- Lambsquarters (common, slimleaf)
- Lettuce, Prickly 2-3 leaf \*
- Mayweed chamomile

- Miners lettuce
- Pigweed (redroot, smooth, tumble)
- Plains coreopsis
- Russian thistle\*
- Shepherd's purse
- Smallseed falseflax
- Smartweed (green, lady's thumb, pale)
- Snow speedwell
- Tansymustard\*
- Treacle mustard (Bushy Wallflower)
- Tumble/Jim Hill mustard
- Volunteer sunflower
- Waterpod
- Wild mustard

**Additional Weeds in Pasture/Rangeland Only**

**F9007 at 0.4 to 0.8 oz. per acre – Weeds Controlled**

- Bitter sneezeweed
- Buttercup
- Carolina geranium
- Cheeseweed
- Common broomweed
- Common mullein
- Common yarrow
- Copperleaf, hophornbeam
- Curly dock
- Dandelion
- Lettuce, Prickly 2-3 leaf \*

- Mallow, common
- Marestail\*
- Plantain
- Purslane, common
- Smartweed PA (seedling)
- Teasel (up to 6 inches)
- Toadflax, yellow
- Velvetleaf
- Wild garlic\*
- Woolly croton\*

**F9007 at 0.8 oz to 1.2 oz per acre – Weeds Controlled**

- Amaranth, spiny
- Annual marshelder
- Anoda, spurred
- Bedstraw, catchweed
- Bitter sneezeweed
- Bittercress
- Blackeyed-Susan
- Buckbrush^
- Buckwheat, wild
- Buffalobur
- Burclover
- Buttercup
- Carolina geranium
- Carpetweed
- Cheeseweed
- Cocklebur
- Common broomweed
- Common mullein
- Common yarrow

- Copperleaf, hophornbeam
- Curly dock
- Dandelion
- Dogfennel
- Eclipta
- Fiddleneck, coast
- Filaree, redstem
- Flixweed
- Groundcherry, smooth (seedling)
- Groundcherry, Wright's
- Gumweed
- Horsemint (beebalm)
- Kochia
- Lettuce, Prickly 2-3 leaf \*
- Jimsonweed
- Mallow, common
- Marestail\*
- Meadowfoam
- Morningglory, entireleaf
- Morningglory, ivyleaf
- Morningglory, pitted
- Morningglory, scarlet
- Musk thistle\*
- Nettle, burning
- Nightshade, American black
- Nightshade, black
- Nightshade, hairy
- Pensacola Bahiagrass
- Pigweed, prostrate
- Plantain
- Purple scabious
- Purslane, common
- Ragweed, common
- Ragweed, giant
- Ragweed, western\*
- Rocket, London
- Sesbania, hemp
- Shepherdspurse
- Smartweed, PA (seedling)
- Sorrel, Red
- Sowthistle, annual
- Speedwell, ivyleaf
- Speedwell, Virginia
- Spiderwort, tropical
- Spurge, prostrate
- Tansymustard
- Teasel (up to 6 inches)
- Thistle, Russian (up to 2 inches tall)
- Toadflax, yellow
- Velvetleaf
- Velvetleaf (24")
- Spurry, corn
- Wild garlic\*
- Woolly croton\*

**F9007 at 1.5 oz. per acre – Weeds Controlled**

Serecia lespedeza\*

**Weeds Suppressed<sup>^\*</sup>**  
**Cereals, Pasture, Rangeland, and Fallow**

**0.4 oz. per acre – Weeds Suppressed<sup>^</sup>**

- Bindweed, field
- Canada thistle\*
- Common sunflower\*
- Corn gromwell\*
- Knotweed (prostrate)\*
- Lettuce, prickly
- Sowthistle, (annual)\*
- Wild buckwheat\*

**1.2 oz. per acre - Brush Suppressed<sup>^</sup>**

- Blackberry
- Dewberry
- Multiflora rose\*
- Wild Plum

**Weeds/Brush Suppressed with Spot Application**  
**(Pasture/Rangeland only) <sup>^</sup>**

**4 oz. per 100 gal. of water**

- Blackberry\*
- Canada thistle\* Dewberry\*
- Multiflora rose\*
- Wild Plum
- Poison Ivy
- Poison Oak
- Poison Sumac
- Silver Sumac
- Staghorn Sumac

\* See the **Specific Weed Problems** section for further recommendations.

<sup>^</sup> Weed suppression is a reduction in weed competition (reduced population and/or vigor) as visually compared to an untreated area. The degree of suppression varies with the rate used, the size of the weeds, and the environmental conditions following treatment.

**\*Specific Weed Problems**

**Tank mix partners must be registered for use in the geography intended for use on the labeled crop.**

**Annual marshelder, Burclover, Carolina horse-nettle, Common cocklebur, Common milkweed, Common ragweed, Giant ragweed, Prickly lettuce, Sunflower, Western ragweed:** Apply F9007 at 0.4 to 0.8 oz/acre in a tank-mix combination with 8-32 oz of Grazon P+D, 4-16 oz of Tordon 22K, 16-32 oz of 2,4-D, 4 to 32 oz of Banvel, 8-32 oz of Weedmaster, 8 oz of Remedy, or 0.35 oz of Amber where these products are labeled for improved post emergence control. F9007 plus Amber is commonly used in for suppression of Ragweed species in areas where phenoxy herbicides are restricted by local regulations.

**Mustard Species** (including Blue Mustard): For best results, apply **F9007** tank mixtures with 2,4-D or MCPA post emergence to mustards, but before bloom.

**Canada Thistle and Sowthistle:** Apply **F9007** plus surfactant or **F9007** plus 2,4-D, clopyraïd, flouroxypyr or MCPA in the spring after the majority of thistles have emerged and are small (rosette stage to 6" elongating stems) and actively growing. The application will inhibit the ability of emerged thistles to compete with the crop. For spot applications to Canada Thistle in pasture and rangeland, apply as a foliar spray

once plant is fully leafed. Apply to runoff and include a surfactant in the spray mix at 1 to 2 qt. per 100 gal. of spray solution. Complete coverage of all foliage and stems is required for control. On tall, dense stands, it is often necessary to spray from both sides to obtain adequate coverage.

**Corn Gromwell and Prostrate Knotweed:** Apply **F9007** plus surfactant when weeds are actively growing, are no larger than 2" tall, and when crop canopy will allow thorough coverage. Tank mixing 2,4-D or MCPA with **F9007** can improve results.

**Kochia, Russian Thistle, and Prickly Lettuce:** Naturally occurring resistant biotypes of these weeds are known to occur. For best results, use **F9007** in a tank mix with Banvel and 2,4-D, or bromoxynil and 2,4-D (suggested rates 3/4 - 1 pt. Buctril + 1/4 - 3/8 lb. active 2,4-D ester). **F9007** should be applied in the spring when kochia, Russian thistle, and prickly lettuce are less than 2" tall or 2" across and are actively growing (refer to the Tank Mixtures section of this label for additional details).

**Sunflower (common/volunteer):** Apply either **F9007** plus surfactant or **F9007** plus 2,4-D or MCPA after the majority of sunflowers have emerged, are 2" to 4" tall and are actively growing.

**Wild Buckwheat:** For best results, apply **F9007** plus 2,4-D or MCPA when plants have no more than 3 true leaves (not counting the cotyledons). If plants are not actively growing, delay treatment until environmental conditions favors active weed growth.

**Marestail:** Apply **F9007** as a broadcast application when marestail rosettes are no wider than 3 inches and actively growing. Where herbicide-resistant marestail populations exist, the addition of 2,4-D at 1 pt/A or dicamba at 8 oz/A may aid in control of resistant marestail.

**Musk Thistle:** Apply **F9007** at 0.8 to 1.2 oz. per acre in the spring or early summer prior to flowering or in the fall after newly emerged plants have reached the rosette stage of growth. Fall applications should be made before the soil freezes.

**Multiflora Rose:** For best control, apply **F9007** as a broadcast application when multiflora rose is less than 3' tall. For spot applications in pasture and rangeland, apply to green canes from leaf emergence through bloom but prior to total leaf emergence. Apply to runoff and include a surfactant in the spray mix at 1 to 2 qt. per 100 gal. of spray solution. Complete coverage of all foliage and stems is required for control. On tall, dense stands, it is often necessary to spray from both sides to obtain adequate coverage.

**Blackberry and Dewberry:** For spot applications in pasture and rangeland, apply as a foliar spray once plant is fully leafed. Apply to runoff and include a surfactant in the spray mix at 1 to 2 qt. per 100 gal. of spray solution. Complete coverage of all foliage and stems is required for control. On tall, dense stands it is often necessary to spray from both sides to obtain adequate coverage.

**Pensacola bahiagrass control in established Bermudagrass pasture:** Apply **F9007** at 1.2 oz. per acre plus surfactant. Apply after green-up in the spring but before bahiagrass seedhead formation. Application should be made when moisture is sufficient to enhance grass growth. **F9007** is very effective for removal of bahiagrass from bermudagrass pastures. In highly infested pastures, the use of **F9007** can clear the areas of useful forage until the bermudagrass has time to cover the area. Therefore, **F9007** treatments should be spread out over a period of years. Do not apply to an entire farm or ranch in one year. Fertilization (particularly with nitrogen and potassium) and/or replanting may accelerate the process of reestablishment of bermudagrass. Under heavy bahiagrass pressure, grazing pressure, or adverse weather conditions (heat and drought), bahiagrass regrowth may occur.

**NOTE:** **F9007** should not be used for the control of common or Argentine bahiagrass. Also, **F9007** should not be applied in liquid fertilizer solutions for Pensacola bahiagrass control, as poor control and/or regrowth may occur.

**Serecia lespedeza:** Apply **F9007** at 1.2 oz. per acre plus a surfactant at 1 to 2 qt. per 100 gal. of total spray solution. For best results, make applications to serecia lespedeza up to full bloom stage of growth. **NOTE:** Do not make applications if drought conditions exist at intended time of application.

**Wild Garlic:** Apply 0.4 to 0.8 oz. per acre of **F9007** in the early spring when wild garlic is less than 12" tall with 2" to 4" of new growth.

**Woolly Croton:** Apply 0.4 to 0.8 oz. per acre of **F9007** in the late spring or early summer at pre-emergence up to 6 inches tall.

## Pasture and Rangeland (21)

### TIMING AND APPLICATION INSTRUCTIONS

**F9007** may be used on some native grasses such as bluestems and grama, and on other pasture grasses such as bermudagrass, bluegrass, orchardgrass, bromegrass, fescue and timothy. Specific application information on several of these pasture grasses follows:

Pasture Grass	Minimum time from stand establishment of Pasture Grass to F9007 application:
Bermudagrass	2 months
Bluegrass, bromegrass and orchardgrass	6 months
Timothy	12 months
Fescue	24 months

#### **Fescue Precautions:**

Note that **F9007** may temporarily stunt fescue, cause it to turn yellow, or cause seedhead suppression. To minimize these symptoms, take the following precautions:

- tank mix **F9007** with 2,4-D
- use the lowest labeled rate for target weeds
- use surfactant at 1/2 to 1 pt. per 100 gal. of spray solution (1/16 to 1/8% v/v)
- make application later in the spring after the new growth is 5 to 6 inches tall, or in the fall
- do not use surfactant when liquid nitrogen is used as a carrier.

The first cutting yields may be reduced due to seedhead suppression resulting from treatment with **F9007**.

#### **Timothy Precautions:**

Timothy should be at least 6" tall at application and be actively growing. Applications of **F9007** to timothy under any other conditions may cause crop yellowing and/or stunting.

To minimize these symptoms, take the following precautions:

- tank mix **F9007** with 2,4-D at the recommended 2,4-D rate for Timothy Grass
- use the lowest labeled rate for target weeds
- use surfactant at 1/2 pt. per 100 gal. (1/16% v/v)
- make applications in the late summer or fall
- do not use surfactant when liquid nitrogen is used as a carrier.

#### **Ryegrass Pastures (Italian or perennial):**

- Do not apply **F9007** to ryegrass as injury or loss of pasture plant stand may result.

**Other Pastures:** Varieties and species of pasture grasses differ in their tolerance to herbicides. When using **F9007** on a particular grass for the first time, limit use to one container. If no injury occurs throughout the season, larger acreage may be treated the following season. Broadleaf pasture species, such as alfalfa and clover are highly sensitive to **F9007** and will be severely stunted or injured by **F9007**.

## **SMALL GRAINS (22)**

**Barley, Triticale, and Wheat**

### **TIMING AND APPLICATION INSTRUCTIONS**

#### **Weed Control Use**

Apply F9007 alone or as a tank mixture with other herbicides to control emerged and actively growing weeds. Apply to winter wheat, spring wheat, barley, and triticale in all tillage systems. For optimum performance, make application to actively growing weeds up to 4 inches tall and rosettes less than 4 inches across. For dense weed pressure, use tank mix combinations.

**Coverage is essential for good control.**

#### **Application Timing – Weed Control**

Apply 0.4 oz. F9007 per acre to wheat, barley or triticale only once per use season.

#### ***Dryland Winter Wheat***

Make applications after the crop is in the 2-leaf stage but before boot once per use season.

#### ***Dryland Barley, Spring Wheat, and Triticale (Except Durum type or Wampum Variety)***

Make applications after the crop is in the 2-leaf stage up to jointing stage once per use season.

#### ***Durum Type and Wampum Variety Spring Wheat***

Make applications after the crop is tillering up to jointing stage once per use season.

Applications to Durum and Wampum varieties should be made in combination with 2,4-D.

#### ***Irrigated Wheat and Barley***

Make applications after the crop begins tillering up to jointing. First post-treatment irrigation should be delayed for at least 3 days after treatment and should not exceed 1 in. of water.

**Do not apply during boot or early heading, as crop injury may result.**

### **TANK MIXTURES IN CEREALS (WHEAT, BARLEY AND TRITICALE)**

Read and follow all manufacturers' instructions for any companion herbicides, fungicides, and/or insecticides. If those instructions conflict with this label, do not tank mix that product with F9007.

Read and follow all label instructions on timing, precautions, and warnings for any companion products before using these tank mixtures. Follow the most restrictive labeling.

F9007 may be tank mixed with other recommended and registered herbicides to control weeds suppressed, resistant, or not controlled with F9007 alone.

#### **Mixture with 2,4-D (amine or ester) or MCPA (amine or ester)**

F9007 can be used as a tank mix treatment with 2,4-D or MCPA (ester formulations provide best results) herbicides after weeds have emerged. For best results, use 0.4 oz. of F9007 per acre: add 2,4-D or MCPA herbicides to the tank at 1/4 to 1/2 lb. active ingredient.

Surfactant may be added to the mixture at 1/2 to 1 qt. per 100 gallons of spray solution; however, adding surfactant may increase the potential for crop injury.

Apply F9007 plus MCPA after the 3 to 5-leaf stage but before boot (with Durum and Wampum varieties do not apply before tillering). Apply F9007 plus 2,4-D after tillering (refer to appropriate 2,4-D manufacturer's label), but before boot.

#### **Mixture with Dicamba**

For best results, apply F9007 at 0.4 oz. per acre: add 1/16 to 1/8 lb. a.i. per acre of dicamba.

Surfactant may be added to the mixture at 1/2 to 1 qt. per 100 gallons of spray solution:

however, adding surfactant may increase the potential for crop injury. Also refer to dicamba labels for application timing and restrictions.

#### **Mixture with 2,4-D (amine or ester) and Dicamba**

F9007 may be applied in a 3-way tank mix with formulations of dicamba and 2,4-D.

Observe all applicable directions, restrictions and precautions on labels of all products used.

Make applications at 0.4 oz. of F9007 + 1/16-1/12 lb. active ingredient dicamba + 4-6 oz. active 2,4-D Ester or Amine per acre. Use higher rates when weed infestation is heavy. Add 1-2 pts. of surfactant to the 3 way mixture, where necessary depending on conditions and infestation. Use of additional surfactant may not be needed with the higher phenoxy rates and ester phenoxy formulations. Consult the specific 2,4-D or dicamba label, or local recommendations for more information.

Apply the 3-way combination to winter wheat after the crop is tillering and prior to jointing (first node). In Spring Wheat (including Durum wheat) apply after the crop is tillering and before it exceeds the 5-leaf stage.

**Mixture with Bromoxynil products (such as Buctril or Bronate)**F9007 may be tank mixed with bromoxynil\* containing herbicides registered for use on wheat, barley, or fallow. For best results, add bromoxynil containing herbicides to the tank at 3 to 6 oz. active ingredient per acre (such as Bronate or Buctril at 3/4 - 1 1/2 pts. per acre).

**Mixture with Starane**

For improved control of Kochia (2-4" tall), Russian thistle, mustard species and wild buckwheat, F9007 may be tank mixed with 1/3 to 1 1/3 pts. per acre of Starane.

**Mixture with Starane + Salvo**

For improved control of Kochia (2-4" tall) Russian thistle, mustard species and wild buckwheat, F9007 may be tank mixed with recommended rates of Starane + Salvo.

**Mixture with Express**

This product may be tank-mixed with Express based on local recommendations and label instructions, precautions, and warnings from all herbicide labels in the mixture.

**Mixture with Harmony Extra** This product may be tank-mixed with Harmony Extra based on local recommendations and label instructions, precautions, and warnings from all herbicide labels in the mixture.

**Mixture with Starane + Sword**

For improved control of Kochia (2-4" tall) Russian thistle, mustard species and wild buckwheat, F9007 may be tank mixed with recommended rates of Starane + Sword.

**Mixture with Maverick**

F9007 can be tank mixed with Maverick" herbicide for improved control of weeds in wheat and barley.

**Mixture with Stinger, Curtail, Curtail M, or Widematch**

F9007 can be tank mixed with Stinger, Curtail, or Curtail M herbicides for improved control of weeds in wheat and barley.

**Mixture with Grass Control Products – Recommendations and Precautions**

Tank mixtures of F9007 and grass control products may result in poor grass control. FMC recommends that you first consult your state experiment station, university, or extension agent, Agricultural dealer, or FMC representative as to the potential for antagonism before using the mixture. If no information is available, limit the initial use of F9007 and the grass product to a small area. Do not tank mix F9007 with Hoelon3EC, as grass control may be reduced.

**Mixture with Assert herbicide or Avenge herbicide**

F9007 can be tank mixed with Avenge or Assert. When tank mixing F9007 with Assert, always include another broadleaf weed herbicide with a different mode of action (for example: 2,4-D ester, MCPA ester, Buctril, or Bronate).

**Mixture with Puma**

F9007 can be tank mixed with Puma herbicide for improved control of weeds in wheat and barley.

**Mixture with Discover NG**

F9007 can be tank mixed with Discover NG herbicide for improved control of weeds in spring wheat.

**Mixture with Everest**

F9007 can be tank mixed with Everest herbicide for improved control of weeds in spring wheat.

**Mixture with Insecticides and Fungicides**

F9007 may be tank mixed or used sequentially with insecticides and fungicides registered for use on Barley, Triticale, and Wheat. However, under certain conditions (drought stress, cold weather, or if the crop is in the 2 – 4 leaf stage), tank mixes or sequential applications of F9007

with organophosphate insecticides (such as chlorpyrifos) may result in temporary crop yellowing or, in some cases severe crop injury.

The potential for crop injury is greatest when wide fluctuations in day/night temperatures occur just prior to or soon after application.

Test these mixtures in a small area before treating large areas.

Do not use F9007 with Malathion, as crop injury will result.

### **F9007 Herbicide with MCPA, 2,4-D, and/or Dicamba for use in suppression of Winter Annual Broadleaf Weeds in Winter Wheat to be Grazed Out in the States of Texas, Oklahoma, New Mexico, and Kansas**

#### **GENERAL INFORMATION**

F9007 herbicide can be tank mixed with MCPA, 2,4-D and/or dicamba for suppression of winter annual broadleaf weeds in winter wheat to be grazed out and not harvested for grain, in the states of Texas, Oklahoma, New Mexico and Kansas.

#### **DIRECTIONS FOR USE**

For the suppression of winter annual broadleaf weeds (such as henbit and mustards) in winter wheat in the states of Texas, Oklahoma, New Mexico and Kansas, apply F9007 at 0.2 oz. per acre. F9007 should be tank mixed with MCPA, 2,4-D and/or dicamba at label rates for each product.

Winter annual broadleaf weeds should be less than 1" tall or in the rosette stage for suppression.

Add a nonionic surfactant having at least 80% active ingredient at 1 to 2 qts. per 100 gallons of spray solution (0.25 to 0.5% v/v).

#### **Rotation Intervals For Crops in Non-Irrigated Land Following Use of F9007 at 0.2 oz. per acre on Wheat That Will be Grazed Out**

Crop	Soil pH	Minimum Cumulative Precipitation (inches)	Minimum Rotation Interval (months)
Grain Sorghum	7.9 or lower	No restrictions	4
Cotton	7.9 or lower	No restrictions	10
Alfalfa	6.8 or lower	No restrictions	10
	6.9 to 7.9	No restrictions	22
Dry Beans	6.8 or lower	No restrictions	10
	6.9 to 7.9	No restrictions	22

For rotation intervals for crops not covered above following the use of F9007 at 0.2 oz. per acre on wheat that will be grazed out, the minimum rotation interval is 22 months with at least 18" of cumulative precipitation during the period:

- to any crop not listed on the rotation intervals table above
- if the soil pH is not in the specified range

To rotate to a crop at an interval shorter than specified, a field bioassay must be successfully completed to rotate to that crop. See section on Field Bioassay for further information.

**IMPORTANT RESTRICTIONS**

This treatment is for use on winter wheat that will be grazed out and will not be harvested for grain.

**IMPORTANT PRECAUTIONS**

**F9007** suppresses weeds by post emergence activity. For best results, apply **F9007** to young, actively growing weeds. The degree and duration of suppression at 0.2 oz. per acre may depend upon the following factors:

- Weed spectrum and infestation intensity
- Weed size at application
- Environmental conditions at and following treatment

**HARVEST AID USE (Barley, Wheat, and Triticale) (23)**

**TIMING AND APPLICATION INSTRUCTIONS**

**F9007 Harvest Aid Use Rate**

Apply **F9007** at 0.4 oz product (0.0088 pound active ingredient) per acre, but not to exceed maximum labeled rates. Refer to the **MAXIMUM ALLOWABLE F9007 USE RATE CHART** and the **PREHARVEST INTERVAL** charts for additional application information. If treatments of **F9007** have been made to the crop earlier, that rate of **F9007** must be considered in determining the maximum use rate as a harvest aid treatment. Apply **F9007** alone or in combination with 2,4-D or Glyphosate to aid in dry-down of many broadleaf weeds to aid in grain harvest.

**Application Timing – Harvest Aid Use (Barley, Wheat, and Triticale)** Apply **F9007** to barley, wheat, and triticale to defoliate and/or desiccate troublesome broadleaf weeds such as morningglories, pigweeds and velvetleaf that may be present at harvest. Apply **F9007** alone or as a tank mixture with other harvest aids.

Applications may be made from when the crop has reached hard dough stage up to 10 days prior to harvest.

Applications shall be made in spray volumes sufficient to provide complete coverage of foliage. Use a minimum of 10 gallons of finished spray per acre for ground application and 2 gallons per acre for aerial application.

**Adjuvant Requirements**

A nonionic surfactant (NIS), methylated seed oil (MSO) or crop oil concentrate (COC) is required. Use a nonionic surfactant (NIS) at 0.25% v/v (2 pints per 100 gallons of spray solution) having at least 80% active ingredient, or a methylated seed oil, or crop oil concentrate (COC)(petroleum or seed oil) at 1 to 2 v/v (1 to 2 gallons per 100 gallons of spray solution). A high quality sprayable liquid nitrogen fertilizer at 2 to 4 % v/v (2 to 4 gallons per 100 gallons spray solution) or ammonium sulfate (AMS) at the rate of 2 to 4 pounds per acre in addition to the nonionic surfactant methylated seed oil or crop oil is allowed.

**Coverage is essential for satisfactory performance.**

**Tank Mixtures for Harvest Aid Use**

A tank mix of **F9007** plus 2,4-D and surfactant, or Glyphosate will assist in dry down of many broadleaf weeds, thereby aiding grain harvest utility and grain quality.

Post emergence application should be made to actively growing weeds after the crop is in the hard dough stage. If weeds are not dry within 10 days after application, delay harvest until weeds is dry.

For information on species controlled with **F9007** alone or in specific mixtures with other products, see the specific Weeds Controlled chart contained within this label.

**Mixture with 2,4-D**

Use 0.4 oz. **F9007** plus 1/4 to 1/2 lb active ingredient 2,4-D per acre on moderate weed infestations; higher rates of 2,4-D may be used on large weeds if permitted by the 2,4-D brand labeling. Include 1 to 2 qt. surfactant per 100 gallons of spray solution.

In areas where 2,4-D use is restricted, apply **F9007** with surfactant only; however, this treatment may be less effective.

**Mixture with Glyphosate**

Use 0.4 oz. F9007 plus the locally labeled rate of Glyphosate (see Glyphosate label for maximum seasonal rate). F9007 requires the use of an adjuvant for optimum activity – Consult the Glyphosate label or local recommendations for the amount of adjuvant to include.

**Precautions**

If applied as a tank mixture, refer to the other product's label for restrictions on tank mixing, and observe all label precautions, instructions and rotational cropping restrictions.

Consult the Rotation Interval Tables for information on the allowed plant back intervals for specific crops, states, and regions before planting any crop following use of F9007 as a harvest aid.

**GRAIN SORGHUM (24)****General Information**

F9007 is for use on irrigated or dryland grain sorghum in Colorado, Kansas, Nebraska, Oklahoma and Texas (North of I-20).

**Use Rate**

Apply F9007 at 0.2 oz. per acre plus 1/4 lb. active ingredient 2,4-D amine per acre. Do not use surfactant or crop oil.

Crop Stage: For optimum performance and crop safety, apply F9007 plus 2,4-D amine when grain sorghum is 4 to 15 inches in height. If sorghum is taller than 10 inches to the top of the canopy, use drop nozzles and keep spray off the foliage. Apply only before the boot stage. Read and follow all other use instructions, warnings and precautions on companion herbicide labels.

Sorghum varieties vary in sensitivity to 2,4-D amine. Spray only varieties known to be tolerant to 2,4-D amine. Contact the appropriate seed company or State University Extension Service for this information.

Pest Stage: Application of F9007 plus 2,4-D amine should be made when all or a majority of the weeds have germinated and emerged. For best results, spray when weeds are less than 6 inches tall.

**Application Information**

F9007 may be applied to grain sorghum by properly calibrated ground or aerial equipment.

F9007 can be used on either dryland or irrigated grain sorghum. If application is made to irrigated sorghum, delay first post-treatment irrigation for at least 3 days after treatment.

The first post-treatment irrigation should not exceed 1.0".

Use cultivation prior to F9007 + 2,4-D amine treatment to cover exposed brace roots of grain sorghum to minimize injury from 2,4-D amine.

Applications shall be made by ground equipment using a minimum finished spray volume of 10 gallons of spray per acre or by air at a minimum finished spray volume of 2 gallons of spray per acre.

**Precautionary Statements**

- Temporary crop yellowing and/or stunting may occur soon after application, especially when crop is under stress conditions.
- Do not use on grain sorghum grown for seed production. Do not use on forage or sweet sorghum.
- Do not harvest for forage or silage within 30 days of application.
- Do not include surfactant or crop oil to the tank mix.
- Do not apply this treatment under cold, wet weather conditions or to grain sorghum growing under stress caused by weather, insects or disease as crop injury may result.
- Do not apply to long season grain sorghum varieties or grain sorghum that is planted after July 1, as crop injury or delayed maturity may occur.
- Do not exceed (1) one application per year.
- F9007 must be used with 2,4-D. In areas where 2,4-D use is restricted, follow requirements of the restriction. If 2,4-D use is prohibited, do not use F9007 on grain sorghum.

**Timing and Method of Application**

Apply F9007 alone or as a tank mixture with other herbicides to emerged and actively growing weeds. Apply F9007 plus 2,4-D amine when grain sorghum is 4 to 15 inches in height.

For optimum performance, make applications to actively growing weeds up to 4 inches tall and rosettes less than 4 inches across. **Coverage is essential for good control.**

**Tank Mixtures**

F9007 may be tankmixed with other herbicides to control weeds not listed on this label. Read and follow all manufacturers' label directions for the companion herbicide except for specific directions on this label. When tank mixing F9007 with other products, be sure the F9007 is mixed in the spray tank water first. For specific mixing instructions, refer to the Mixing and Loading Instructions under the GENERAL INFORMATION section. Refer to the other product's label for restrictions on tankmixing, and observe all label precautions, instructions, and rotational cropping restrictions. Sprayers shall be adjusted and operated to avoid the application of excessive herbicide rates directly over the row and/or into the whorl of the sorghum plant.

Leaf speckling can occur when F9007 is used with certain formulations of crop protection products and adjuvants. Refer to the Tank Mixtures and Adjuvant Use Requirements sections under General Information.

**Broadcast applications of F9007 to sorghum with wet foliage** or application during periods of adverse environmental conditions such as cool, cloudy, wet, or high humidity may cause increased crop response. For additional information on crop response, refer to the General Information section of the F9007 label.

**Weeds Controlled with a tank mix of F9007 plus**

**2,4-D amine are:** Velvetleaf, Puncturevine, and Pigweed spp. except where resistant species exist, such as ALS resistant pigweeds.

**Directed Application**

Use drop nozzles if applications are to be made under adverse conditions such as cool, cloudy, wet, or high humidity environments to limit the amount of product deposited onto sorghum leaves and/or into the sorghum whorl.

**HOODED SPRAYER APPLICATION (25)**

Apply **F9007** to the row middles of emerged crops using hooded sprayers in accordance with the following specific use information.

Apply **F9007** with hooded sprayers to control labeled weeds between the rows of labeled emerged crops. This treatment is for crops grown in rows, and includes crops grown in rows where mulch or plastic barriers are used as a weed control tool in the drill or plant line.

**Hooded sprayers must be designed, adjusted and operated in such a manner to totally enclose the spray pattern and to prevent any spray deposition to green stem tissue, foliage, blooms or fruit of the crop.**

Sprayers shall not be operated at more than five (5) miles per hour in order to minimize vertical movement of the sprayer during application, including the bouncing or raising of the equipment. Use extreme care in applying to fields where the soil surface is uneven, has deep furrows, drains or other contours that would disturb the adjustment and positioning of the spray equipment and/or the spray pattern. Applications must not be made when wind conditions may disturb the spray patterns and result in spray deposition to sensitive plants or plant parts.

For optimum performance, make application to actively growing weeds up to 4 inches tall and rosettes less than 3 inches across. **Coverage is essential for good control.**

## FALLOW SYSTEMS (26)

### Use Rate

Apply F9007 at 0.4 oz product (0.0088 pound active ingredient) per acre.

### Application Timing – Weed Control

Apply F9007 by ground or air alone or with other herbicides in the fallow period prior to planting or the emergence of any crop listed on this label to control or suppress weeds. Apply on emerged weeds that are actively growing in conditions that are conducive to F9007 adsorption and translocation throughout the plant. For optimum performance, make applications to actively growing weeds up to 4 inches high or rosettes less than 3 inches across. Utilize adjuvants and adequate spray volumes to insure optimum plant cuticle penetration and foliar coverage of weeds. **Coverage is essential for good weed control.**

### Adjuvant Requirements

A nonionic surfactant or crop oil concentrate or methylated seed oil is required. Use a nonionic surfactant (NIS) at 0.25% v/v (2 pints per 100 gallons of spray solution) having at least 80% active ingredient or a petroleum or oil seed based crop oil concentrate (COC) at 1.5 to 2 % v/v (1.5 to 2.0 gallons per 100 gallons of spray solution) or a methylated seed oil (MSO). A high quality sprayable liquid nitrogen fertilizer at 2 to 4 % v/v (2 to 4 gallons per 100 gallons) or ammonium sulfate at 2 to 4 pounds per acre in addition to the selected NIS, MSO or COC is allowed.

### Tank Mixtures in Fallow Use

Optimum broad-spectrum control of annual and perennial weeds requires a tank mix with a broad-spectrum burndown herbicide such as glyphosate, glufosinate or paraquat. When tankmixing F9007 with other products, be sure the F9007 is added to the spray tank water first. For specific mixing instructions, refer to the Mixing and Loading Instructions under the GENERAL INFORMATION section.

For all products used in tank mixes, refer to the specific product labels for all restrictions on tankmixing and observe all label precautions, instructions and rotational cropping restrictions.

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